

The role of affect in sentence perception

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Abstract

The role of affect and sentence processing is an understudied topic. In an event-related potential (ERP) language experiment, we investigated modulation of the P300 ERP component by dispositional affect. Using our previous ERP paradigm, we employed a 3x2 design where 32 participants read sentences presented in 1- and 2-word chunks (Berent et al., 2005; Patson & Warren, 2010). Sentences started with subject nouns that were either universally quantified or not, and continued with a direct object which was either indefinite, definite singular, or plural e.g., (i) Every kid climbed a tree/the tree/the trees vs. (ii) The kid climbed a tree/the tree/the trees. Number judgments were required at tree(s), which was always presented alone (and never final). Reduced P300 amplitudes were observed for the plural condition indicating interference; furthermore, low positive affect individuals showed responses sensitive to local high probability features associated with the control singular condition.